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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,289	03/12/2004	Bartolomeo Tosco	320044.401	8187

500 7590 10/27/2004

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EXAMINER

LIN, ING HOUR

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,289

Applicant(s)

TOSCO, BARTOLOMEO

Examiner

Ing-Hour Lin

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 2, line 3, "of defining" is unclear.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1-5, 9-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagarwalla et al in view of Lapeus et al.

Nagarwalla et al (col. 3, lines 64+) teach the claimed method and apparatus for producing sand cores for foundry, comprising: providing mold cavity and sand mold tooling elements including gassing manifolds, vertically displaceable work table, and an ejector pin assembly contained within the gassing manifold chamber for the purpose of effectively providing a principal duct site of gas flow vertically communicating with the mold cavity through ejector pins openings. Nagarwalla et al fail to teach the use of a flow of aeriform directed in a radial or horizontal direction perpendicular to the principal vertical direction.

However, Lapeus et al (col. 1, lines 66+) teach the use of a flow of aeriform directed in a radial direction 170 perpendicular to the principal vertical direction for the purpose of effectively curing the foundry cores. It would have been obvious to one having ordinary skill in the art to provide Nagarwalla et al of a flow of aeriform directed in a radial or horizontal direction perpendicular to the principal vertical direction as taught by Lapeus et al in order to effectively cure the foundry cores.

6. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagarwalla et al in view of Lapeus et al and further in view of Matalon.

Nagarwalla et al in view of Lapeus et al fail to teach the use of rapid dehydration.

However, Matalon (col. 4, lines 13+) teaches the use of rapid dehydration on the foundry cores through the use of vacuum suction for the purpose of effectively drying and hardening the cores in a range between 5 seconds and 10 minutes. It would have been obvious to one having ordinary skill in the art to provide Nagarwalla et al in view of Lapeus et al the use

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rapid dehydration on the foundry cores as taught by Matalon in order to effectively dry and harden the cores in a range between 5 seconds and 10 minutes.

7. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagarwalla et al in view of Lapeus et al and further in view of Nagarwalla et al.

Nagarwalla et al in view of Lapeus et al fails to teach the use of respective pressure duck lines and valve assembly.

However, McKibben et al (col. 2, lines 23+) teaches the use of respective pressure duck lines (gas circuits) and control valve assembly for the purpose of effectively providing pressure control of the flow of aeriform through the mold cavity. It would have been obvious to one having ordinary skill in the art to provide Nagarwalla et al in view of Lapeus et al the use of respective pressure duck lines and control valve assembly as taught by McKibben et al in order to effectively control the flow pressure of aeriform through the mold cavity.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ing-Hour Lin whose telephone number is (571) 272-1180. The examiner can normally be reached on M-F (8:00-5:30) Second Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

L.H.L.

I.-H.Lin

10-15-04

KILEY S. STONER
PRIMARY EXAMINER

Kiley Stoner 10/18/04